AMENDMENTS TO THE CLAIMS

The listing of claims provided below will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) A process for the preparation of synthetic organo-polymeric tanning agent ~~essentially free from formaldehyde~~ used for tanning leather, said process comprising the steps of:

(a) reacting an aromatic compound with sulfuric acid at a temperature in the range of 40 to 60°C to obtain a sulfonized aromatic compound;

(b) adding one or more organic ligands to the sulfonized aromatic compound of step (a) to obtain a mixture;

(c) heating the mixture at a temperature in the range of 60 to 80° C;

(d) adding one or more multi-functional polymers to the mixture of step (c);

(e) heating the mixture of step (d) at a temperature in the range of 40 to 100° C to obtain a reaction mixture to obtain a compound wherein the sulfonized aromatic compound is polymerized to the multi-functional polymer or polymers;

(f) adding water to the reaction mixture to obtain a pH of between 3.0 to 3.5;

(g) optionally, aerating the reaction mixture; and

(h) optionally, drying the reaction mixture to obtain the synthetic organo-polymeric tanning agent.

2. (Original) The process according to claim 1, wherein the aromatic compound comprises 1-14 carbon atoms.

3. (Original) The process according to claim 1, wherein the aromatic compound is reacted with sulfuric acid for a time period in the range of 50 to 250 minutes.

4. (Original) The process according to claim 1, wherein sulfuric acid is in an amount of 1 to 5 moles per mole of aromatic compound.

5. (Original) The process according to claim 1, wherein the aromatic compound is selected from the group consisting of naphthene, anthracene, and phenol.

6. (Original) The process according to claim 1, wherein the organic ligand is selected from the group consisting of formic acid, citric acid, phthalic acid, salicylic acid, oxalic acid, their sodium salts, and mixtures thereof.

7. The process according to claim 1, wherein the organic ligand is in an amount of 0.01 to 0.1 moles per mole of the aromatic compound.

8. (Original) The process according to claim 1, wherein the multi-functional polymer is selected from the group consisting of polyacrylic acid, methacrylic acid, and mixtures thereof.

9. (Original) The process according to claim 1, wherein the multi-functional polymer is in an amount of 0.001 to 0.01 moles per mole of the aromatic compound.

10. (Original) The process according to claim 1, wherein water is in an amount of 5 to 25 moles per mole of aromatic compound.

11. (Original) The process according to claim 1, wherein the pH of the reaction mixture is adjusted by adding sodium bicarbonate or by sodium hydroxide solution.

12. (Original) The process according to claim 1, wherein the reaction mixture is aerated by passing air /inert gas through the reaction mixture.

13. (Original) The process according to claim 1, wherein the reaction mixture is aerated for a time period in the range of 30 to 60 minutes.

14. (Original) The process according to claim 1, wherein the reaction mixture is dried either by drum drying or by spray drying.

15. (Original) The process according to claim 1, wherein the reaction mixture is dried at temperature in the range of 130 to 260°C.

16. (Currently amended) The process according to claim 1, wherein the synthetic organo-polymeric tanning agent obtained, when utilized in the presence of one or more chromium salts, has chromium exhaust in the range of 90 to 99 %.

17. (Original) A synthetic organo-polymeric tanning agent obtained according to the process of claim 1.

18. (Original) A leather product obtained using the synthetic organo-polymeric tanning agent according to claim 17.